

Amendments to the Drawings:

The attached sheets of drawings includes changes to Figs. 3, 4A, 4B and 4C. These sheets, which include Figs. 2A-2F, 3 4A-4C and 5A-5C, replace the original sheets including these figures. In Figs. 3, 4A, 4B and 4C, reference numbers have been added to be consistent with amendments made to the specification.

Attachment: Replacement sheets (2)
Annotated Sheet Showing Changes

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for production of an optically diffractive structure provided with a surface configuration having a plural corrugation-like shape including a plurality of peak-like shapes and valley-like shapes convexo-concave shapes, comprising steps of:

providing a duplication plate material provided with a surface configuration having a plural corrugation-like shape including a plurality of peak-like shapes and valley-like shapes convexo-concave shapes, and having a cross-sectional surface crosswise to said corrugation, in which a cross-sectional area above a midline of one peak-like shape is smaller than a cross-sectional area below the midline of one valley-like shape adjacent to said one peak-like shape, the midline being a line a salient section which is defined by a salient line and a middle line which is drawn by connecting midpoints of the height of each peak-like shape the convexo-concave shapes is smaller in area than that of an adjacent reentrant section which is defined by a reentrant line and the middle line and these salient and reentrant sections are situated next to each other on the bias having midpoints in common;

pressing an optically diffractive layer made of ionizing radiation curable resin with the duplication plate material under a heating or non-heating condition to impart a surface configuration having a plural corrugation-like shape including a plurality of peak-like shapes and valley-like shapes convexo-concave shapes to the optically diffractive layer; and

peeling the cured optically diffractive layer from the duplication plate material; and
curing the optically diffractive layer with ionizing radiation after and/or upon providing
said surface configuration.

2. (Original) A process for production of an optically diffractive structure according to claim 1, wherein the middle line is drawn crosswise to a tangent to an inflection of the corrugation when the corrugation is curved.

3. (Currently amended) A process for production of an optically diffractive structure according to claim 1, wherein the corrugation-like shape including a plurality of peak-like shapes and valley-like shapes ~~convexo-concave shapes~~ comprise individually standing peak-like shapes.

4. (Canceled)

5. (Currently amended) A medium having an optically diffractive structure produced by a process comprising steps of:

providing a duplication plate material provided with a surface configuration having a plural corrugation-like shape including a plurality of peak-like shapes and valley-like shapes ~~convexo-concave shapes~~, and having a cross-sectional surface crosswise to said corrugation, in which a cross-sectional area above a midline of one peak-like shape is smaller than a cross-sectional area below the midline of one valley-like shape adjacent to said one peak-like shape, ~~the midline being a line a salient section which is defined by a salient line and a middle line which is drawn by connecting midpoints of the height of each peak-like shape the convexo-concave shapes is smaller in area than that of an adjacent reentrant section which is defined by a reentrant line and the middle line and these salient and reentrant sections are situated next to each other on the bias having midpoints in common;~~

pressing an optically diffractive layer made of ionizing radiation curable resin with the duplication plate material under a heating or non-heating condition to impart a surface configuration having a plural corrugation-like shape including a plurality of peak-like shapes and valley-like shapes convexo-concave shapes to the optically diffractive layer; and

peeling the cured optically diffractive layer from the duplication plate material; and

curing the optically diffractive layer with ionizing radiation after and/or upon providing said surface configuration.

6. (Currently amended) A medium having an optically diffractive structure according to claim 5, wherein a surface of the optically diffractive layer comprises a collection of plural sections different in corrugation direction and/or corrugation cycle, and/or wherein peak-like shapes and valley-like shapes convexo-concave shape and/or each peak-like shape convexo-concave height may be different.

7. (Currently amended) A medium having an optically diffractive structure according to claim 5, wherein the corrugation-like shape convexo-concave shapes form a relief hologram and/or a diffraction grating.

8. (New) The process according to claim 1, which includes wrapping the duplication plate around a cylindrical plating drum so as to mass duplicate the diffractive structure by a roll-to-roll method.

9. (New) The medium according to claim 5, which includes wrapping the duplication plate around a cylindrical plating drum so as to mass duplicate the diffractive structure by a roll-to-roll method.

10. (New) The process according to claim 1, wherein the optically diffractive structure is relief hologram.

11. (New) The medium according to claim 5, wherein the optically diffractive structure is relief hologram.

12. (New) The process according to claim 1, wherein the optically diffractive structure has at least an area in which a peak is not lined in parallel with the adjacent peak thereof.

13. (New) The media according to claim 5, wherein the optically diffractive structure has at least an area in which a peak is not lined in parallel with the adjacent peak thereof.

14. (New) The process according to claim 1, wherein the optically diffractive structure comprises a random combination of plural sections different in diffraction direction.

15. (New) The media according to claim 5, wherein the optically diffractive structure comprises a random combination of plural sections different in diffraction direction.